

# EVALUATING MARKET DYNAMICS AND EXPOSURES VIA ATTRIBUTION

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WisdomTree has been enhancing its technology infrastructure to help clients understand performance drivers of our Indexes, the markets generally and how to optimize portfolios. One new attribution engine we developed has been particularly helpful in evaluating market dynamics.

Below I highlight how various factors are impacting U.S. large-cap stocks in 2017 through October 31.

- Profitability as a factor has been rewarded in 2017. Breaking out the [S&P 500](#) into quintiles of factors, profitability or [return-on-equity \(ROE\)](#) quintiles had large differences in returns, with the top three ROE quintiles showing significantly better returns than the bottom two ROE quintiles and negative earners. ROE as a factor mattered.
- On a [dividend yield](#) basis, there was significant underperformance of the top dividend yield quintiles compared to the lowest-dividend quintile or zero-dividend-yield stocks. Dividend yield has been an unhelpful factor in 2017.
- On an [earnings yield](#) basis, again cheaper stocks lagged the more expensive stocks, with the first quintile stocks with highest earnings yields (lowest P/E ratios) having the worst returns and the fifth quintile for most expensive, lowest-earnings-yield stocks having the best returns. P/E ratio did not matter.

## Market Drivers of the S&P 500, by [Fundamental](#) Metrics

	ROE Quintiles		Dividend Yield Quintiles		Earnings Yield Quintiles	
	Category	Group Return	Category	Group Return	Category	Group Return
Highest	1st Quintile	22.00%	1st Quintile	3.73%	1st Quintile	15.04%
High	2nd Quintile	17.87%	2nd Quintile	13.62%	2nd Quintile	16.23%
Mid	3rd Quintile	19.39%	3rd Quintile	19.44%	3rd Quintile	17.32%
Low	4th Quintile	13.30%	4th Quintile	18.69%	4th Quintile	15.97%
Lowest	5th Quintile	11.27%	5th Quintile	22.04%	5th Quintile	24.62%
	Negative ROE	4.27%	Zero Div. Yield	29.07%	Negative Earnings	3.54%
	Total	16.91%	Total	16.91%	Total	16.91%

Sources: WisdomTree, FactSet, 12/30/16–10/31/17. Past performance is not indicative of future results.

Let's drill further into two WisdomTree Indexes on opposite sides of the performance bar in 2017 to understand market behavior more: the broad [WisdomTree U.S. Dividend Index](#), which lagged with over-weights to high dividend stocks, and the [WisdomTree U.S. Quality Dividend Growth Index](#), which outperformed alongside the high-ROE quintiles.

## Standard Sector Analysis

Let's begin the performance decomposition with sector analysis of the wisdomTree U.S. Dividend Index compared to a broad market capitalization-weighted index, the [MSCI U.S.A. Index](#).

WTDI vs. MXUS (12/30/16–10/31/2017)									
Sector	Attribution Components				Average Sector Weights			Sector Performance	
	Allocation	Stock Selection	Interaction	Total Attribution	WT Index Weight	Benchmark Weight	+/- Wgt	WT Index Return	Benchmark Return
Energy	-0.12%	0.31%	0.03%	0.22%	6.93%	6.35%	0.59%	-2.78%	-7.21%
Health Care	-0.08%	0.17%	-0.03%	0.06%	10.73%	13.99%	-3.26%	19.96%	18.92%
Materials	0.01%	0.00%	0.00%	0.01%	3.10%	2.94%	0.17%	21.20%	20.98%
Utilities	-0.04%	0.03%	0.02%	0.00%	6.03%	3.15%	2.88%	16.34%	15.51%
Industrials	0.00%	-0.12%	0.00%	-0.13%	10.24%	9.73%	0.51%	14.31%	15.51%
Financials	0.03%	-0.28%	0.03%	-0.23%	12.84%	14.26%	-1.42%	13.44%	15.48%
Consumer Staples	-0.54%	0.18%	0.08%	-0.29%	13.17%	8.90%	4.28%	6.54%	4.73%
Consumer Discretionary	0.06%	-0.75%	0.20%	-0.49%	9.36%	12.83%	-3.47%	9.50%	15.24%
Real Estate	-0.45%	-0.13%	-0.21%	-0.78%	8.06%	3.07%	5.00%	4.27%	8.15%
Telecom Services	-0.77%	-0.07%	-0.07%	-0.91%	4.80%	2.36%	2.44%	-13.57%	-11.38%
Information Technology	-1.42%	-1.47%	0.50%	-2.39%	14.74%	22.44%	-7.70%	29.40%	37.17%
<b>Total</b>	<b>-3.33%</b>	<b>-2.13%</b>	<b>0.55%</b>	<b>-4.91%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12.12%</b>	<b>17.03%</b>

Sources: WisdomTree, FactSet.

Year-to-date, the wisdomTree U.S. Dividend Index had a tough performance period, lagging the benchmark by just under 500 basis points.

Explaining the attribution:

The sectors in this attribution table are sorted by the "total attribution," which can come from one of three sources: The first is the allocation differences to that sector (whether it was over-weighted or under-weighted) and whether that sector outperformed the market. Then there is also stock selection within a sector—and whether the investment methodology added value compared to the benchmark within the sector. And finally, there is an interaction component between these two in terms of weighting and stock selection/methodology.

In 2017, there has been a large dispersion in returns, with the technology sector being the lead sector of the market, up 37.2% through October 31. This sector is the biggest weight in [market capitalization-weighted](#) benchmarks and the biggest differential in the wisdomTree U.S. Dividend Index compared to the market. It is no surprise that this sector thus created a drag, and approximately 50% of the performance difference year-to-date can be explained by this sector. The next two greatest drags came from high-dividend sectors—telecommunication services and real estate, both of which received greater weight in the wisdomTree U.S. Dividend Index compared to the market.

### Quality Outperforming

Not all dividend indexes are underperforming in 2017, however. The wisdomTree U.S. Quality Dividend Growth Index, which selects its constituents based on screens for earnings growth estimates and quality variables, is outperforming its broad, large-cap benchmark, the S&P 500 Index.

Interestingly, while this Index has closer representation to the broad market in the technology sector, in this dividend Index, technology was also a drag, as dividend-paying technology stocks and stock selection were a net drag on performance.

This was overcome by the quality Index focus on industrials, where there was a large over-weight position and also positive stock selection benefits, as well as a large under-weight to energy that benefited the Index.

WTDGI vs. SPX (12/30/16 -10/31/2017)									
Sector	Attribution Components				Average Sector Weights			Sector Performance	
	Allocation	Stock Selection	Interaction	Total Attribution	WT Index Weight	Benchmark Weight	+/- Wgt	WT Index Return	Benchmark Return
Industrials	-0.23%	1.15%	1.01%	1.94%	18.96%	10.19%	8.77%	25.82%	14.28%
Energy	1.72%	0.16%	-0.15%	1.73%	0.42%	6.41%	-5.99%	-6.09%	-7.40%
Health Care	0.07%	1.04%	0.40%	1.51%	19.40%	14.12%	5.28%	26.40%	19.10%
Telecom Services	0.76%	0.00%	0.00%	0.76%	0.00%	2.31%	-2.31%	-	-12.03%
Financials	0.18%	1.25%	-0.83%	0.60%	4.87%	14.42%	-9.55%	24.17%	15.15%
Real Estate	0.26%	0.14%	-0.14%	0.26%	0.09%	2.92%	-2.82%	12.41%	8.09%
Materials	0.01%	0.11%	0.04%	0.17%	3.84%	2.84%	1.01%	24.34%	20.28%
Utilities	0.02%	0.00%	0.00%	0.02%	0.00%	3.19%	-3.19%	-	16.28%
Consumer Discretionary	-0.11%	-0.27%	-0.13%	-0.51%	17.37%	12.23%	5.15%	12.59%	14.82%
Consumer Staples	-0.56%	-0.49%	-0.32%	-1.36%	14.58%	9.06%	5.52%	0.31%	5.13%
Information Technology	-0.32%	-1.86%	0.13%	-2.05%	20.46%	22.32%	-1.86%	28.04%	37.79%
<b>Total</b>	<b>1.82%</b>	<b>1.22%</b>	<b>0.02%</b>	<b>3.06%</b>	-	-	-	<b>19.97%</b>	<b>16.91%</b>

Sources: WisdomTree, FactSet. Past performance is not indicative of future results. You cannot invest directly in an index.

Going beyond sector attribution, we can also look at this attribution according to fundamental sorts. This Quality Dividend Growth Index has a sorting process that rewards companies with higher ROE than the market. Comparing ROE quintiles of the WisdomTree U.S. Quality Dividend Growth Index to the S&P 500, as shown earlier, one can see that in the first quintile, for highest-ROE companies, the WisdomTree U.S. Quality Dividend Growth Index has 42.9% allocated there, while the market has only 22.8% there.

This over-weight was one of the top drivers of performance. The other segment that really helped was under-weighting the lowest-profitability stocks, the fifth quintile of ROE, which was only 2.1% of the WisdomTree U.S. Quality Dividend Growth Index but 15.3% of the S&P 500. Both the under-weight to this sector but also stock selection within that quintile helped.

In general, what this table shows is the WisdomTree U.S. Quality Dividend Growth Index has more than 90% allocated to the top three quintiles by ROE, whereas the S&P 500 only has about 60% allocated there. These profitability tilts were rewarded in 2017, and it also helps to understand the general approach of the WisdomTree Index to focus on the highest-profitability stocks while avoiding the worst-ranking ROE stocks.

**ROE Quintiles: WTDGI**

Category	Allocation	Selection	Interaction	Total	Index Weight	Benchmark Weight	Active Weight	Index Group Return	Benchmark Group Return
1st Quintile	1.06%	0.15%	0.11%	1.32%	42.89%	22.84%	20.06%	22.54%	22.00%
2nd Quintile	0.12%	-0.05%	-0.08%	-0.01%	31.64%	19.50%	12.14%	17.64%	17.87%
3rd Quintile	-0.01%	-0.96%	0.06%	-0.90%	16.34%	18.42%	-2.08%	13.75%	19.39%
4th Quintile	0.49%	0.59%	-0.48%	0.60%	3.51%	17.21%	-13.70%	16.65%	13.30%
5th Quintile	0.74%	3.04%	-2.57%	1.20%	2.13%	15.32%	-13.19%	33.13%	11.27%
Negative Return	0.45%	0.04%	-0.04%	0.45%	0.02%	3.51%	-3.50%	8.42%	4.27%
Not Classified	-0.07%	0.39%	0.09%	0.40%	3.47%	3.21%	0.26%	31.25%	19.69%
<b>Total</b>	<b>2.78%</b>	<b>3.20%</b>	<b>-2.92%</b>	<b>3.06%</b>				<b>19.97%</b>	<b>16.91%</b>

Sources: WisdomTree, FactSet, 12/30/16–10/31/17. Past performance is not indicative of future results. You cannot invest directly in an index.

While understanding the drivers of performance in 2017 cannot lead you to say these ROE quintiles will continue to perform as they have, it does help you understand market dynamics more fully. Dividend yield as a factor has not been rewarded in 2017—perhaps so much that it will cause some to start exploring it as a candidate for mean reversion opportunities given the relative underperformance for the highest-quintile stocks.

For standardized performance and the most recent month-end performance click [here](#) NOTE, this material is intended for electronic use only. Individuals who intend to print and physically deliver to an investor must print the monthly performance report to accompany this blog.

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## DEFINITIONS

**S&P 500 Index**: Market capitalization-weighted benchmark of 500 stocks selected by the Standard and Poor's Index Committee designed to represent the performance of the leading industries in the United States economy.

**Return on Equity (ROE)**: Measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

**Dividend yield**: A financial ratio that shows how much a company pays out in dividends each year relative to its share price.

**Earnings yield**: The earnings per share for the most recent 12-month period divided by the current market price per share. The earnings yield (which is the inverse of the P/E ratio) shows the percentage of each dollar invested in the stock that was earned by the company.

**Fundamentals**: Attributes related to a company's actual operations and production as opposed to changes in share price.

**MSCI USA Index**: is designed to measure the performance of large and mid cap segments of the US market.

**Market capitalization-weighting**:  $\text{Market cap} = \text{share prices} \times \text{number of shares outstanding}$ . Firms with the highest values receive the highest weights in approaches designed to weight firms by market cap.